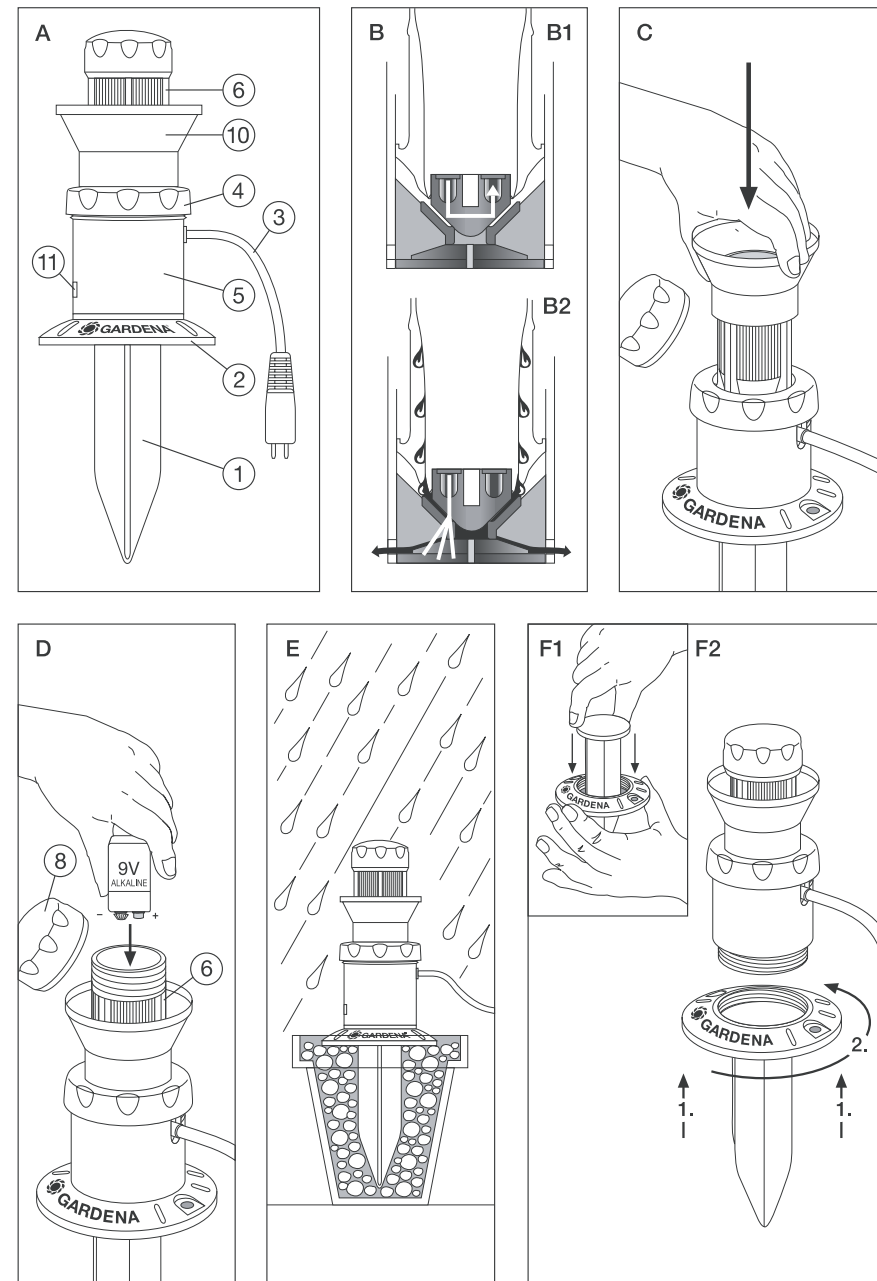
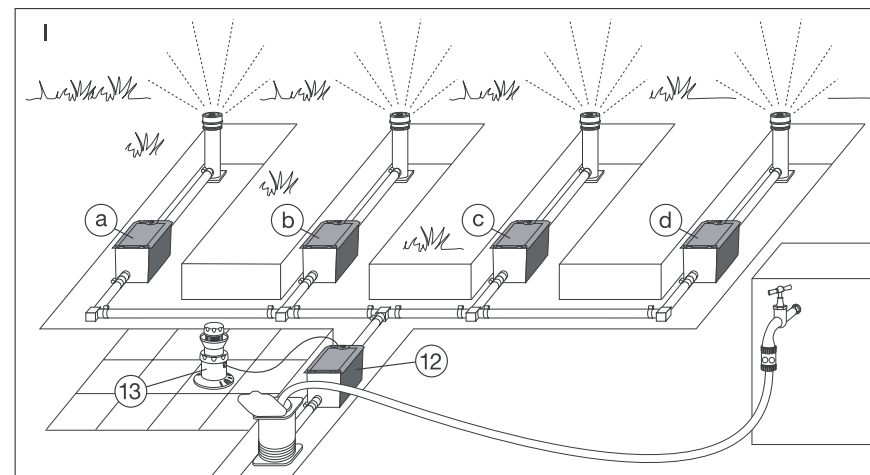
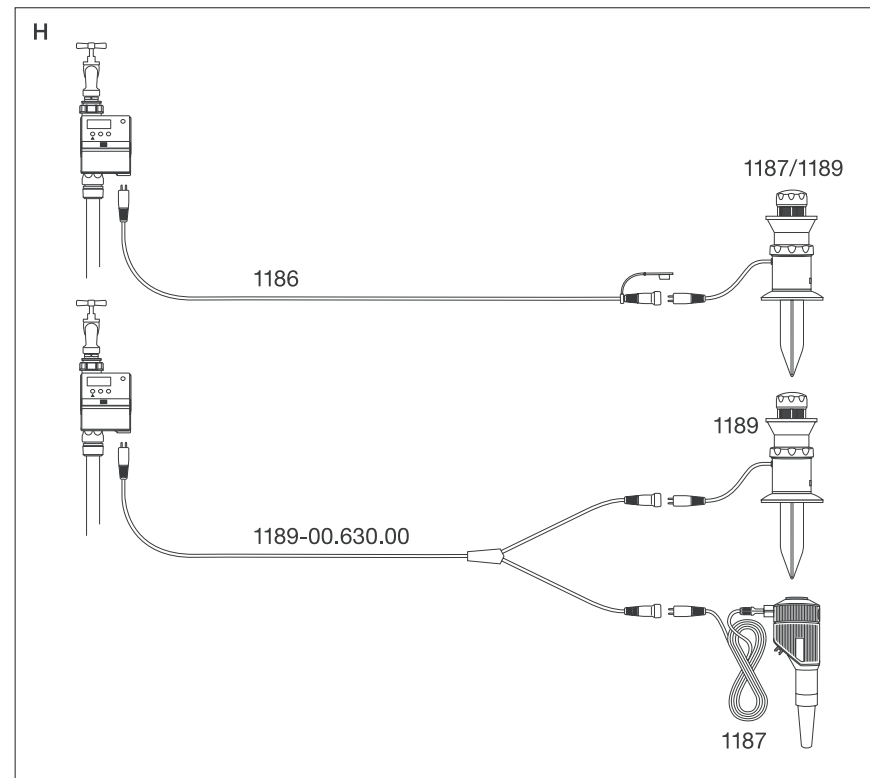
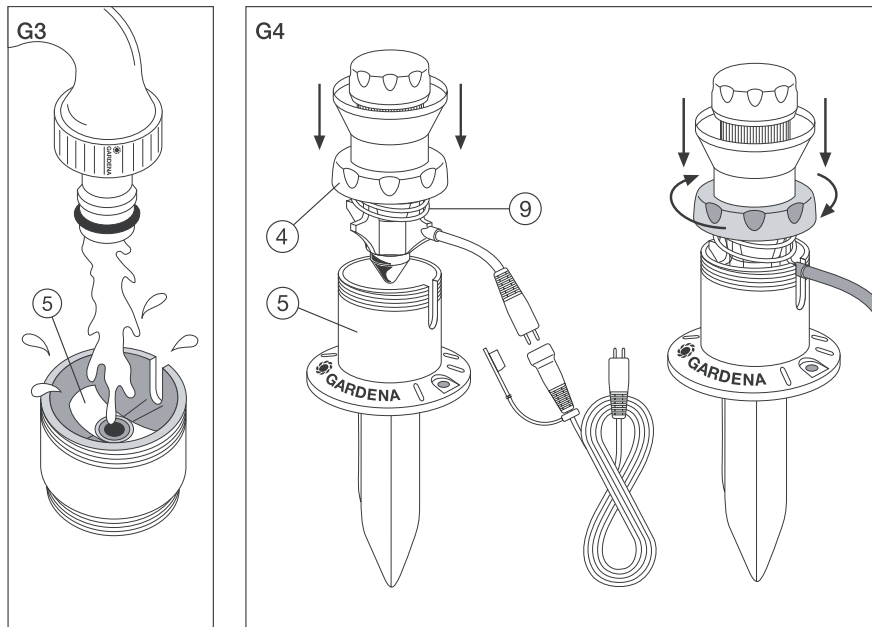
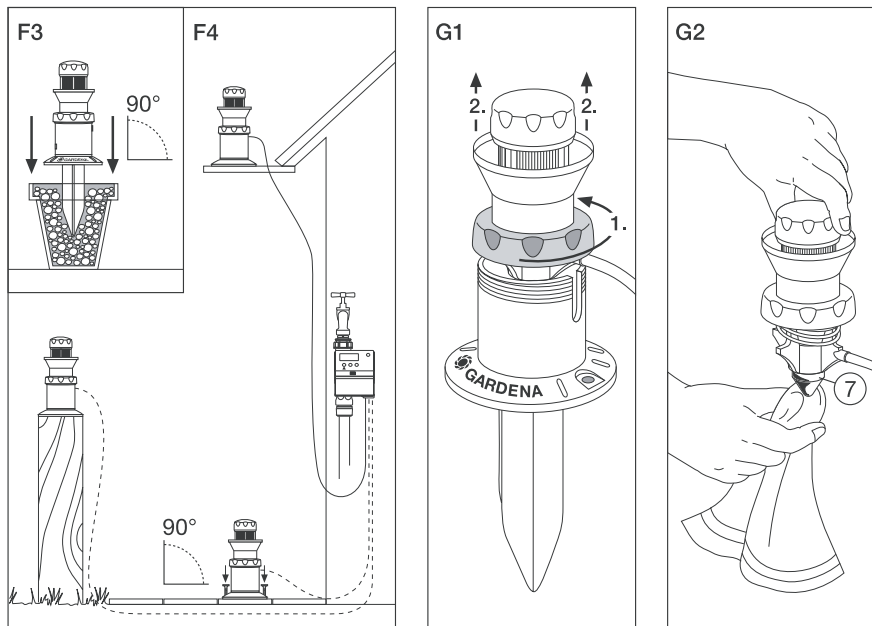


Art. 1189

<b>D</b>	<b>Gebrauchsanweisung</b> Regensensor electronic
<b>GB</b>	<b>Operating Instructions</b> Rain Sensor Electronic
<b>F</b>	<b>Mode d'emploi</b> Pluviomètre électronique
<b>NL</b>	<b>Gebruiksaanwijzing</b> Elektronische regensensor
<b>SCAN</b>	<b>Bruksanvisning</b> Elektronisk regnføler
<b>I</b>	<b>Istruzioni per l'uso</b> Sensore di pioggia elettronico
<b>E</b>	<b>Manual de instrucciones</b> Sensor de lluvia electrónico
<b>P</b>	<b>Instruções de utilização</b> Sensor de chuva electrónico

<b>D</b>	Gebrauchsanweisung Garantie	Seite	6 - 13 65
<b>GB</b>	Operating Instructions Guarantee	page	14 - 20 65
<b>F</b>	Mode d'emploi Garantie	page	21 - 27 66
<b>NL</b>	Gebruiksaanwijzing Garantie	pagina	28 - 35 66
<b>SCAN</b>	Bruksanvisning Garanti	sida	36 - 42 67
<b>I</b>	Istruzioni per l'uso Garanzia	pagina	43 - 49 67
<b>E</b>	Manual de instrucciones Garantía	página	50 - 57 68
<b>P</b>	Manual de instruções Garantie	página	58 - 64 68






# GARDENA

## Rain Sensor Electronic




### 1. Notes on these Operating Instructions

Please read these operating instructions carefully and observe the notes given. Use these operating instructions to familiarise yourself with the Rain Sensor, the unit's features and proper use as well as with the notes on safety.


 **For safety reasons, children and young people under 16 as well as anyone who is not familiar with these operating instructions may not use the Rain Sensor. The Rain Sensor must only be used to control the components recommended by the manufacturer.**

**Keep these operating instructions in a safe place.**

### 2. Proper Use

 **The Rain Sensor is a measuring instrument; please handle it with care!**

The GARDENA Rain Sensor is intended for private use in domestic and hobby gardens, exclusively for outdoor use, to control sprinklers and watering systems by means of water computers<sup>1)</sup> taking natural rainfall into consideration.

 **The Rain Sensor must not be used for industrial purposes or in conjunction with chemicals, foodstuffs, easily flammable and explosive materials.**

Compliance with the operating instructions provided by the manufacturer is a prerequisite to ensure proper use of the GARDENA Rain Sensor.

The operating instructions also contain operating, servicing and maintenance conditions.

<sup>1)</sup> Water Computer 1030 and 1060, 1060 U, Water Timer Electronic T 14 and T 1030, Water Computer Plus C 1030 and Profi C 1060, GARDENA Solenoid Valve Boxes, GARDENA Automatic Valves, GARDENA Pump Relay, GARDENA Flower Box Watering Set, and Watertimer electronic.

### 3. Operating Parts (Fig. A/D/G/I)

- |                   |                               |                   |
|-------------------|-------------------------------|-------------------|
| ① Spike           | ⑥ Housing                     | ⑩ Cone            |
| ② Base            | ⑦ Lens                        | ⑪ Air inlets      |
| ③ Cable           | ⑧ Lid for battery compartment | ⑫ Automatic Valve |
| ④ Nut             | ⑨ Spring                      | ⑬ Rain Sensor     |
| ⑤ Lens-receptacle |                               |                   |

### 4. How the Rain Sensor Works

The **Rain Sensor detects natural precipitation** as shown in Fig. B:

**If it is dry** (Fig. B 1), a ray of light is sent from the emitting to the receiving diode: The watering programme remains activated.

**If it rains** (Fig. B 2), the ray of light is diverted due water drops on the surface of the lens: The watering programme is de-activated.

The watering is interrupted until the water drops are dried out on the surface of the lens. The duration of the dry-out period depends on the weather (humidity, temperature, wind, etc.). Keep the air inlets ⑪ free, to make sure that the Rain Sensor dries out faster.

The **response time of the Rain Sensor** depends on the amount of precipitation. Without the cone ⑩, the automatic watering is interrupted at a precipitation level of approximately 1 l/m<sup>2</sup>. If the cone was mounted, the response time is shorter.

If the **Rain Sensor dries out again**, watering begins at the next programmed starting time.

Watering can be initiated manually **despite** registered precipitation by using the **On/Off** function at the respective water controller.

### 5. Preparations for Use

Before using the Rain Sensor you must

1. insert the battery,
2. choose the position for the Rain Sensor and
3. set up the Rain Sensor.

### 5.1 Inserting the Battery (Fig. D)

**Note:** The battery is not included.

 **To achieve the maximum operating time of 1 year only a 9 V alkaline battery type IEC 6LR61 may be used. We recommend Varta and Energizer batteries.**

1. Unscrew the lid of the battery compartment ⑧.
2. Insert the battery in the housing **in the correct position** ⑥.  
**Note:** Pay attention to the +/– markings in the battery compartment and on the battery.
3. Replace the lid ⑧ on the housing ⑥.

### 5.2 Choosing the Position (Fig. E)

Position the Rain Sensor in a place which is exposed to natural rainfall.  
**Important!** Make sure that the Rain Sensor is only exposed to natural rainfall and that it is not in a place influenced by watering installations, i.e. sprinklers etc.

**Important!** In order not to reduce its performance, the Rain Sensor should not be installed at or near soil (danger of contamination).

### 5.3 Assembling/Setting up the Rain Sensor

 **When assembling or setting up the Rain Sensor make sure that soil and other foreign bodies do not penetrate the lens. This prevents the Rain Sensor working properly.**

#### Mounting the cone (Fig. C)

To mount the cone proceed as follows:

1. Mount the cone onto the Rain Sensor according to fig. C.
2. Make sure the cone is in correct position (lugs move in guiding grooves).

The Rain Sensor can be mounted either with the spike (Fig. F) or with the base ②.

#### Fixing the spike (Fig. F)

1. Insert the spike ① from above into the opening in the base ② and screw the base/spike to the receptacle ⑤.
2. Insert the spike e.g. into a flower pot filled with gravel, until it stops.  
**Note:** Avoid fixing the Rain Sensor in soil, as soil may splash during rain and thus reduce the performance of the Rain Sensor.  
**Note:** Make sure that the Rain Sensor is inserted in a perpendicular position (90°) (Fig. F 3).

#### Mounting the base ② (Fig. F 4)

1. **Alternatively** the Rain Sensor can be screwed on a firm ground, e.g. on the roof of the house, a stake or onto plates:  
Screw the base ② **without the spike** onto the receptacle ⑤.
2. Secure the Rain Sensor using two screws e.g. on plates or similarly firm ground.  
**Note:** Make sure that the Rain Sensor is inserted in a perpendicular position (90°).

#### Controlling a watering system consisting of several watering lines by using one Rain Sensor (Fig. I)

When controlling the watering system consisting of several watering lines, the precipitation may be controlled centrally via one Rain Sensor:

Prior to the watering lines, a central Automatic Valve ⑫, Art. No. 1241 is installed and connected with the Rain Sensor ⑬ (see fig. I). However, make sure, that the watering data of the respective automatic valve responds with the data set at the central automatic valve.

#### Example:

The following data are set at the automatic valves:

	Start-Time	Duration	Cycle
Valve a	18:00 h	30 minutes	daily
Valve b	20:00 h	20 minutes	every 2nd day
Valve c	22:00 h	1 hour	every 3rd day
Valve d	24:00 h	1 hour	daily

These watering data must also be set at the central automatic valve ⑫, in order to prevent watering despite rainfall.

## 6. Putting the Rain Sensor into Operation

Connect the Rain Sensor to a GARDENA water controller using the plug on the accompanying cable ③ (see also the operating instructions for the respective water controller).

**Important:** When laying the cable make sure that it is not in a place where it could be damaged or cause you or others to trip over it. When laying the cable underground we recommend laying the cable e.g. in a bed of sand.

## 7. Maintenance, Care, Storage

### 7.1 Storage

The cable-plug-connection of the Rain Sensor must be disconnected from the water controller and the Rain Sensor removed from the ground **before the frosty season begins**.

Over the winter, clean and store the Rain Sensor in a dry and dust-free place away from frost.

### 7.2 Cleaning (Fig. G)

To ensure that the Rain Sensor works properly, keep the lens ⑦ clean.

Clean the lens as follows:

1. Unscrew the nut ④ from the lens-receptacle ⑤ (Fig. G 1).

2. Remove the housing ⑥.

3. Clean the lens ⑦ with a clean, soft, damp cloth (Fig. G 2).

**Note:** If the Rain Sensor is really dirty, the inside of the lens-receptacle ⑤ should also be cleaned, e.g. with clean water (Fig. G 3). Unscrew the lid ⑧ and remove the cone ⑩.

**Do not use any harsh household cleaning agents or scouring powder!**

4. Dry the lens. **Warning! Use a clean, dry, soft cloth to prevent scratching.**

5. Replace the housing ⑥ on the lens-receptacle ⑤. Secure the lens-receptacle with the nut ④ by compressing the spring ⑨ (Fig. G 4).

### 7.3 Change the battery once a year

To ensure that the Rain Sensor works properly we recommend you exchange the battery at least once a year (see also "Inserting the Battery").

## 8. Accessories available

If the connection cable on the Rain Sensor is not long enough, it can be extended using the 10 m Extension Cable, GARDENA Art. No. 1186 up to a maximum of 105 m (Fig. H).

To consider the soil moisture in addition to the natural precipitation, the GARDENA Adaptor 1189-00.630.00 (obtainable at GARDENA Service) may be used. Both the Rain Sensor Electronic and the Soil Moisture Sensor may be connected to the water controller (Fig. H). This is due to prevent the start of the watering program when the rain sensor indicates dry but the soil moisture is sufficient.

## 9. Faults

Fault	Possible cause	Remedy
<b>Water computer does not turn on although it is not raining.</b>	Rain Sensor is dirty.	Clean the lens (see chapter "Cleaning").
	The Rain Sensor is installed in an area watered by artificial watering.	Move the Rain Sensor to a place which is not watered by artificial watering.
	The battery power of the water controller is too low.	Exchange the battery in the water controller.
	Moisture due to dew.	Dry the lens.
<b>The water computer turns on despite precipitation.</b>	Rain Sensor not dried out yet.	
	The Rain Sensor is not plugged into the water computer.	Insert the plug in the connection socket.
	The battery power of the Rain Sensor is not sufficient.	Exchange the battery in the Rain Sensor.
	Precipitation is too low.	If necessary, mount the cone to abbreviate the response time.

If you have any problems with your Rain Sensor Electronic, please contact our Customer Service or return the defective unit together with a short description of the problem directly to one of the GARDENA Service Centres listed on the back of this leaflet.

If covered under warranty, please include a copy of the receipt.

**We expressly point out that, in accordance with the product liability law, we are not liable for any damage caused by our units if it is due to improper repair or if parts exchanged are not original GARDENA parts or parts approved by us, and, if the repairs were not carried out by a GARDENA Service Centre or an authorised specialist. The same applies to spare parts and accessories.**

## EU Certificate of Conformity

The undersigned

GARDENA Kress + Kastner GmbH · Hans-Lorenser-Str. 40 · D-89079 Ulm

hereby certifies that, when leaving our factory, the unit indicated below is in accordance with the harmonised EU guidelines, EU standards of safety and product specific standards.

This certificate becomes void if the unit is modified without our approval.

**Description of the unit:**

Rain Sensor Electronic

**Year of CE marking:**

1998

**Art. no.:** 1189

Ulm, 14.07.1998

**EU directives:**

Electromagnetic Compatibility

89/336/EC

Directive 93/68/EC



Thomas Heintl

Technical Dept. Manager

**D****Garantie**

GARDENA gewährt für dieses Produkt 2 Jahre Garantie (ab Kaufdatum). Diese Garantieleistung bezieht sich auf alle wesentlichen Mängel des Gerätes, die nachweislich auf Material- oder Fabrikationsfehler zurückzuführen sind. Sie erfolgt durch die Ersatzlieferung eines einwandfreien Gerätes oder durch die kostenlose Reparatur des eingesandten Gerätes nach unserer Wahl, wenn folgende Voraussetzungen gewährleistet sind:

- Das Gerät wurde sachgemäß und laut den Empfehlungen in der Gebrauchsanweisung behandelt.
- Es wurde weder vom Käufer noch von einem Dritten versucht, das Gerät zu reparieren.

Defekte an dem Regensensor durch falsch eingelegte oder ausgelaufene Batterien sind von der Garantie ausgeschlossen.

Diese Hersteller-Garantie berührt die gegenüber dem Händler/Verkäufer bestehenden Gewährleistungsansprüche nicht.

Im Servicefall schicken Sie bitte das defekte Gerät zusammen mit einer Kopie des Kaufbelegs und einer Fehlerbeschreibung per Abhol-Service (nur in Deutschland) oder frankiert an die auf der Rückseite angegebene Serviceadresse.

Nach erfolgter Reparatur senden wir das Gerät frei an Sie zurück.

**GB****Guarantee**

GARDENA guarantees this product for 2 years (from date of purchase). This guarantee covers all serious defects of the unit that can be proved to be material or manufacturing faults. Under warranty we will either replace the unit or repair it free of charge if the following conditions apply:

- The unit must have been handled properly and in keeping with the requirements of the operating instructions.
- Neither the purchaser or a non-authorised third party have attempted to repair the unit.

Defects in the Rain Sensor attributable to batteries which have been incorrectly installed or are leaking are excluded from the warranty provisions.

This manufacturer's guarantee does not affect the user's existing warranty claims against the dealer/seller.

If you have any problems with your Rain Sensor Electronic please contact our Customer Service or return the defective unit together with a short description of the problem directly to one of the GARDENA Service Centres listed on the back of this leaflet.

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